

Department of Conservation and Natural Resources

Division of Environmental Protection

Bureau of Mining Regulation and Reclamation

Water Pollution Control Permit

Permittee: Queenstake Resources USA, Inc.

Jerritt Canyon Mine

HC 31 Box 78 Elko, NV 89801

Permit Number: **NEV0000020 (Renewal)**

Pursuant to Nevada Revised Statutes (NRS) 445A.300 through 445A.730, inclusive, and regulations promulgated thereunder by the State Environmental Commission and implemented by the Division of Environmental Protection (the Division), this permit authorizes the Permittee to construct, operate, and close the **Jerritt Canyon Mine**, in accordance with the limitations, requirements and other conditions set forth in this permit. The Permittee is authorized to process up to 3,000,000 tons of ore per year.

This facility is located in Elko County, Township 40N, Range 53E, Sections 1-36; Township 41N, Range 53E, Sections 22-36; Township 41N, Range 54E, Sections 19-22, and 27-34; Township 39N, Range 53E, Sections 1-16 and 19-22; Township 39N, Range 54E, Sections 1-6; and Township 40N, Range 54E, Sections 3-9, Mount Diablo Baseline and Meridian (MDB&M), approximately 46 miles north of the town of Elko.

The Permittee must comply with all terms and conditions of this permit and all applicable statutes and regulations.

This permit is based on the assumption that the information submitted in the renewal application of June 8, 1999, and updated in September 2003, and as modified by subsequent approved amendments, is accurate and that the facility has been constructed and is being operated as specified in the submitted application. The Permittee must inform the Division of any deviation from or changes in the information in the application, which may affect the Permittee's ability to comply with applicable regulations or permit conditions.

This permit is effective as of August XX, 2004, and shall remain in effect until August XX, 2009, unless modified, suspended, or revoked.

Signed this YY day of August 2004.

David Gaskin, P.E. Bureau Chief Bureau of Mining Regulation and Reclamation

I. Specific Facility Conditions and Limitations

- A. In accordance with operating plans and facility design reviewed and approved by the Division the Permittee shall:
 - 1. Construct, operate, and close the **Jerritt Canyon Mine** in accordance with those design plans;
 - 2. Contain within the fluid management system all process fluids including all meteoric waters which enter the system as a result of the 25-year, 24-hour storm event; and
 - 3. Not release or discharge any contaminants from the fluid management system which would degrade waters of the state.

B. Schedule of Compliance

- 1. Marlboro Canyon Sulfate Reduction Facility: The Permittee shall submit a final report on the performance of the Pilot Sulfate Reduction Trench by March 31, 2005. If the trench fails to achieve its performance goals, the Permittee must propose alternative remediation method(s), which may potentially include regrading and covering the Rock Disposal Areas to preclude infiltration of meteoric waters, pursuant to NAC 445A.430.
- 2. *Duck Pond:* The Permittee shall submit a design proposal for the replacement or upgrade of the Duck Pond to meet the minimum design criteria pursuant to NAC 445A.435 within 180 days after the effective date of this permit.
- 3. Barren and Last Chance Ponds: The Permittee shall submit a Final Permanent Closure Plan within 180 days after the effective date of this permit including a schedule for the closure of the Barren and Last Chance Ponds.
- C. The fluid management system and facility covered by this permit consists of the following process components:
 - 1. Lined heap leach pad (8 cells) and associated solution collection areas;
 - 2. Solution collection pipes and lined solution collection ditches;
 - 3. The Pregnant, Barren, Cooling, Last Chance and Wash Ponds, corresponding leak detection systems and any systems (i.e. pipelines and lined trenches) capable of fluid conveyance;
 - 4. All components of the mill process facility including, but not limited to, all tanks, basins, sumps, pumps, and piping necessary to interconnect the components within the building;
 - 5. The tailings impoundment including all tails water decant and removal systems;
 - 6. All ground water pumping components that comprise the contamination containment systems; and

7. Transfer pipes, valves, and pumps used in conveyance, control or detection of process fluids between process components.

D. Monitoring Requirements

	Identification	<u>Parameter</u>	Frequency
1.	Water Supply Wells WW-4 (if operated during the year) WW-5 WW-6	Profile I ²	Annually
2.	Leak Detection Sumps Pregnant Pond (PP) Barren Pond (BP) Wash Pond (WP) Cooling Pond (CP) New Wash Pond (NWP) Overflow (Last Chance) Pond (OP) Cooling Tower 2 Horizontal Drain Port (CT)	Average daily accu- mulation in gallons per day (gpd)	Weekly ¹
3.	Process Solutions Pregnant Pond Solution (PS) Cooling Pond Solution (CS) Barren Pond (BP) Duck Pond (DP) CIL Tailings Solution prior to release into Tailings Impoundment (CIL)	Profile II³	Quarterly
4.	Tailings Supernatant Pond Solution Tailings Supernantant Pond (TSP)	Volume in gallons	Semi-Annually (June and October in coordination with bathymetric studies)
5.	Mined Materials Development Rock (Waste Rock) Characterization	MWMP and Profile II ³ (by Rock Type)	Semi-Annual Composites (1 st and 3 rd Quarters)
		ANP/AGP (range), ANP/AGP (average), and PAG Waste/Total Waste (%) (by Mine and Rock Type)	Quarterly
6.	Tailings Impoundment Solids CIL Tailings Solids prior to release into tailings impoundment	MWMP, ANP/AGP and Profile II³	Quarterly
	Identification	<u>Parameter</u>	Frequency

7.

Surface Water Monitoring—Creeks⁵

*a) Profile III*⁴ Mill Creek (MC-1 and MC-2) a) Quarterly (when Burns Creek (BC-2 and BC-3) site access is Italian Spring Creek (ITSN) possible) Stump Creek (STC) b) Profile I^2 b) Annually (during 2nd quarter) Winters Creek (WC) Snow Canyon Creek (SC) Snow Canyon Creek downgradient of Snow Canyon RDA (SC-100) Sheep Creek (SHE-10 and SHE-15) Jerritt Canyon Creek (JC-2, JC-3 and GD-1) Unnamed Tributary downgradient of Gracie RDA (GDSP-10)

8. <u>Surface Water Monitoring—Creeks</u>⁶

Foreman Creek (FC)

Mill Site #1 (MS-1)

Mill Site #2 (MS-2)

Foreman Cr. Near Evans Ranch (ERFC)

a) pH, WAD CN,

TDS, Cl

b) Profile I²

b) Annually (during 2nd quarter)

9. <u>Surface Water Monitoring—Springs</u>⁷

Jim Wright's Spring (JWS)

Charlie Van Norman's Spring (CVS)

Robbin Van Norman's Spring (VNS)

Sheep Creek Spring (SHESP-10)

Monitoring Well Upgradient of Sheep Creek

Spring (SH-103)

PH, Flow in gallons

per minute (gpm),

As, Fe, Total Alkalinity, Conductivity,

and TDS

10. Sulfate Reduction Trench Monitoring Ports and Well—Marlboro Canyon

Marlboro Canyon Downgradient Sample
Port (MCDSP-10)
Sulfate Reduction Trench Port #1A (SRT-1A)
Sulfate Reduction Trench Port #2A (SRT-2A)
Sulfate Reduction Trench Port #3A (SRT-3A)
Sulfate Reduction Trench Port #4A (SRT-4A)
Sulfate Reduction Trench Monitor Well #1
(SRTMW-1)

Identification Parameter Frequency

11. Sulfate Reduction Trenches Monitoring Wells and Sites—Marlboro Canyon

	Sulfate Reduction Trench Monitor Well #2 (SRTMW-2)	Profile I^2	Quarterly
	Sulfate Reduction Trench Monitor Well #3 (SRTMW-3)		
	Sulfate Reduction Trench Monitor Well #4 (SRTMW-4)		
	Sulfate Reduction Trench Monitor Well #5 (SRTMW-5)		
	Road Seep (RS) Jerritt Creek Sediment Pond #1 (JCSP-1)		
12.	Cooling Tower #2 Remediation Observation Manifesting Well (OMW, 14)	a) Drumina Data in	a) Waalda
	Observation Monitoring Well (OMW-14) Dewatering Point North (DPN-1F)	a) Pumping Rate in gallons per minute (gpm), total volume pumped (gallons) and depth to water (feet below ground surface)	a) Weekly
		b) TDS, Cl, As, Hg and Sb	b) Quarterly
13.	Cooling Tower #2 Remediation Observation Monitoring Well (OMW-13)	a) Depth to water	a) Weekly
	Groundwater Well (GW-47)	(feet below ground surface)	u) weekly
		b) As and Hg	b) Quarterly
14.	Smith Maintenance Shop Well Diesel Fuel Remediation		
	Smith Maintenance Shop Well	Volume of diesel Fuel Recovered	Quarterly
		(during quarter and total recovered in	
		gallons) and	
		thickness of	
		Hydrocarbon-Free Product (inches)	
15.	Smith Maintenance Shop Well Diesel Fu	el Remediation	
	Sheep Creek (SHE-10)	TPH (in addition to	Quarterly
	Sheep Creek Spring (SHESP-10)	other analyses required pursuant to	
		I.D.7 and I.D.9)	
16.	Mill Maintenance Shop Area		
	Lower Shop Cut-Off Trench (LSCT)	Volume pumped (gallons)	Monthly
	<u>Identification</u>	<u>Parameter</u>	Frequency
17.	Mill Maintenance Shop Area		

Lower Shop Cut-Off Trench (LSCT) TPH Quarterly
Observation Monitoring Well (OMW-9)
Observation Monitoring Well (OMW-11)

18. Mill Maintenance Shop Area

Observation Monitoring Well (OMW-7) Profile I² and depth Semi-Annually (2nd Observation Monitoring Well (OMW-9) to water (feet below ground surface)

19. Tailings Impoundment (South Side Remediation—New Collection Wells)

Dewatering Points South (DPS-7A)

Dewatering Points South (DPS-7B)

Pumping rate in

gallons per minute
(gpm) and depth to
water (feet below
ground surface)

20. Tailings Impoundment (South Side Remediation—Monitoring Wells)

Groundwater Well (GW-6)

Groundwater Well (GW-46)

Jerritt Canyon Monitor (JCM-16A)

Jerritt Canyon Monitor (JCM-20A)

Depth to water (feet Biweekly Biweekl

Profile I^2 Quarterly

21. Tailings Impoundment (South Side Remediation—Monitoring Well)

Jerritt Canyon Monitor (JCM-18A)

Depth to water (feet Biweekly below ground surface) and Cl

22. <u>Tailings Impoundment</u> (South Side Remediation—Monitoring Wells)

Jerritt Canyon Monitor (JCM-10A)

Jerritt Canyon Monitor (JCM-12C)

below ground

surface)

Biweekly

below ground

23. Tailings Impoundment

Jerritt Canyon Monitor (JCM-1)

Groundwater Well (GW-15)

Groundwater Well (GW-22)

Groundwater Well (GW-26)

Groundwater Well (GW-43)

Heap Leach Monitoring Well (HL-1)

Heap Leach Monitoring Well (HL-2)

<u>Identification</u> <u>Parameter</u> <u>Frequency</u>

24. Tailings Impoundment

Semi-Annually (2nd *Profile I* 2 and depth Groundwater Well (GW-11) and 4th Quarters) Groundwater Well (GW-13) to water (feet below Groundwater Well (GW-14) ground surface) Groundwater Well (GW-18) Groundwater Well (GW-21) *Groundwater Well (GW-27)* Groundwater Well (GW-30) Groundwater Well (GW-33) Groundwater Well (GW-34) Tailings Well (TW-1C) Jerritt Canyon Monitor (JCM-10B) Jerritt Canyon Monitor (JCM-20B)

The Permittee may request a reduction in the number of elements and frequency of analyses after one year of complete monitoring based on justification other than cost. Such reductions will be considered formal modifications to the permit.

(1) The sumps must be inspected and evacuated on a more frequent basis than weekly if the fluid level is above the top of the sump or the invert of any pipe which discharges into the sump, whichever level is lower. Records are required documenting the volume, date and time of extraction to show that sumps are maintained in this condition.

(2) Profile I

Alkalinity (as CaCO₃) Magnesium Manganese Bicarbonate Total Mercury Nickel Aluminum Antimony Nitrate Arsenic pH (± 0.1 units) Barium Potassium Beryllium Selenium Cadmium Silver

CadmiumSilverCalciumSodiumChlorideSulfateChromiumThallium

Copper Total Dissolved Solids Fluoride WAD Cyanide

Iron Zinc

L

Lead

(3) Profile II

Alkalinity (as CaCO₃)

Manganese

Bicarbonate Mercury
Total Molybdenum
Aluminum Nickel
Antimony Nitrate

Arsenic pH (± 0.1 units) Barium Phosphorus Bervllium Potassium Bismuth Scandium Boron Selenium Cadmium Silver Calcium Sodium Chloride Strontium Chromium Sulfate Cobalt Thallium Copper Tin Fluoride Titanium

Gallium Total Dissolved Solids

Iron Vanadium Lead WAD Cyanide

Lithium Zinc

Magnesium

(4) Profile III

 $\begin{array}{ccc} \text{pH} & & \text{Iron} \\ \text{Total Dissolved Solids} & & \text{Zinc} \\ \text{Total Alkalinity} & & \text{CO}_3 \\ \text{Calcium} & & \text{HCO}_3 \\ \end{array}$

Magnesium Total Suspended Solids

Chloride Aluminum

Nitrate as N Phosphorous (Total)

Sulfate Turbidity
Arsenic Conductivity

Acidity

(5) Surface Water Monitoring Sites--Creeks

JC-2	Jerritt Creek approximately 5000 feet upgradient from the USFS
	haundam

boundary.

JC-3 Jerritt Creek at USFS boundary.

GD-1 Down gradient from Gracie Rock Disposal Area (RDA) but

upstream of the confluence with Jerritt Canyon Creek.

MC-1 Below Mill Creek RDA.

MC-2 Mill Creek at the USFS Boundary.
 BC-2 Discharge from sediment pond standpipe.
 BC-3 Burns Creek at the USFS Boundary.

STC Stump Creek at an approximate elevation of 6760 feet.

WC Winters Creek above the confluence with the Middle Fork of

Winters Creek.

SC	Snow Canyon Creek at an approximate elevation of 6150 feet.
SC-100	Snow Canyon Creek downgradient of Snow Canyon RDA.
GDSP-10	Unnamed Tributary downgradient of Gracie RDA.
ITSN	Italian Spring Creek, 800 feet upstream of its confluence with
	Burns Creek.
SHE-10	Sheep Creek Monitoring Site #10.
SHE-15	Sheep Creek Monitoring Site #15.

(6) Surface Water Monitoring Sites--Creeks

FC	Foreman Creek between the 6100 and 6200 feet elevation.
MS-1	In the drainage that feeds Foreman Creek due east of the tailings
	impoundment at the 6220 feet elevation.
MS-2	In the drainage that feeds Foreman Creek to the southeast of the
	tailings impoundment at the 6220 feet elevation.
ERFC	Foreman Creek at the 6400 feet elevation just downstream of Evans
	Ranch and upstream of the mill.

(7) Surface Water Monitoring Sites—Springs

JWS	Spring located about 1/2 mile east of Jim Wright's Ranch. Identified as Niagara Spring on USGS 7.5 Quad. map.
CMC	C 1 C \ 1
CVS	Spring at Charlie Van Norman's Ranch. Sampled at discharge to
	water tank in Mr. Van Norman's backyard.
VNS	Spring that is the water source for Robin Van Norman's Ranch,
	located approximately 500 feet south of Mill Creek at the USFS
	boundary.
SH-103	Monitoring Well upgradient of Sheep Creek Spring
SHESP-10	Sheep Creek Spring

- E. Quarterly and annual monitoring reports and spill reporting shall be in accordance with Part II.B.
- F. All sampling and analysis accuracy shall be in accordance with Part II.E.
- G. **Permit Limitations**

- 1. The daily accumulation of flow that exceeds 150 gallons per day averaged over the quarter in any of the leak detection sumps identified in Part I.D.2.
- 2. The daily accumulation of flow that exceeds 50 gallons per day averaged over the year in any of the leak detection sumps identified in Part I.D.2.
- The tailings supernatant pond volume exceeding the quarterly and yearly target 3. volumes as established in the 2003 Update of Tailings Storage Facility (TSF) Operating Plan dated September 19, 2003 (Attachment 5, Jerritt Canyon Project,

Water Pollution Control Permit (WPCP) NEV0000020, 2003 Update).

- 4. The Tailings Facility and Seepage Collection System shall be maintained such to preclude further migration of seepage. Remedial efforts shall continue to ensure contraction of the overall extent of the tailings seepage.
- 5. Storage of process solution in the Emergency Catchment Pond or the Last, Last Chance Pond for more than 20 consecutive days.
- 6. Those portions of the Wet Mill which are inactive shall not be used without first conducting an engineering evaluation and submitting a report to the Division verifying compliance with current design requirements.
- 7. The Permittee shall not introduce any solution to the Heap Leach Pad without first conducting an engineering evaluation and submitting a report to the Division verifying compliance with current design requirements.

Exceedence of these limitations may be permit violations and shall be reported as specified in Part II.B.4.

- H. The facility shall maintain a calibrated rain gauge which shall be monitored daily or capable of recording daily accumulations. A record of all daily accumulations of precipitation shall be maintained on site.
- I. The Permittee shall inspect all control devices, systems and facilities weekly. Drainage and containment systems shall also be inspected after storms and, when possible, during storms. These inspections are performed to detect evidence of at least:
 - 1. Deterioration, malfunction, or improper operation of control systems;
 - 2. Sudden changes in the level of the contents of any monitoring device;
 - 3. The presence of liquids in leak detection systems; and
 - 4. Severe erosion or other signs of deterioration in dikes, diversions, or other containment devices.
- J. Prior to initiating permanent closure activities at the facility or any process component within the facility, the Permittee must have an approved Final Permanent Closure Plan.
- K. The Permittee shall remit an annual review and services fee in accordance with NAC 445A.232 starting July 1 after the effective date of this permit and every year thereafter until the permit is terminated or the facility has received final closure certification from this Division.
- L. The Permittee shall not dispose of or remediate hydrocarbon-contaminated soil exceeding 100 mg/kg Total Petroleum Hydrocarbon (TPH) on the mine site without first obtaining a General or Individual Mining Bioremediation Facility Permit from the Division
- II. General Facility Conditions and Limitations

A. General Requirements

- 1. The Permittee shall achieve compliance with the conditions, limitations, and requirements of the permit upon commencement of each relevant activity. The Administrator may, upon the request of the Permittee and after public notice, revise or modify a Schedule of Compliance in an issued permit if he determines good and valid cause (such as, but is not limited to, an act of God, a labor strike, materials shortage or other event over which the Permittee has little or no control) exists for such revision.
- 2. The Permittee shall at all times maintain in good working order and operate as efficiently as reasonably possible, all devices, facilities, or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this permit.
- 3. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or correct information. Any inaccuracies found in this information may be grounds for revocation or modification of this permit and appropriate enforcement action.

B. General Reporting Requirements

- 1. The Permittee shall submit **quarterly reports**, which are due to the Division on or before the 28th day of the month following the quarter and must contain the following:
 - a. Monitoring results from the leak detection sumps identified in Part I.D.2, reported on NDEP Form 0590 or equivalent;
 - b. Analytical results of the solution collected from monitoring locations identified in Part I.D.3, I.D.7, I.D.8, I.D.9, I.D.10, I.D.11, I.D.17, I.D.18, I.D.23 and I.D.24 reported on NDEP Form 0090/0190 (as appropriate) or equivalent;
 - c. Water levels for site monitoring wells identified in Part I.D.18, I.D.23 and I.D.24;
 - d. Tailings Supernatant Pond solution volume specifically identified in Part I.D.4 only for those quarters monitored;
 - e. Flow rates and volumes for monitoring wells specifically identified in Part I.D.9 and I.D.16;
 - f. Analytical results of the MWMP and ANP/AGP testing for the materials identified in Parts I.D.5 and I.D.6, reported on NDEP Form 0090/0190 (as appropriate) or equivalent and other data required in Part I.D.5; and
 - g. A record of spills and releases, and the remedial actions taken in accordance with the approved Emergency Response Plan on NDEP Form 0490 or equivalent.

Facilities, which have not initiated mining or construction or are inactive, still must submit a status report quarterly. Subsequent to any noncompliance or any facility expansion which provides increased capacity, the Division may require an accelerated monitoring frequency.

- 2. The Permittee shall submit an **annual report** by February 28th of each year, which contains the following:
 - a. Analytical results of water quality samples collected from water supply wells identified in Part I.D.1, reported on NDEP Form 0190;
 - b. Analytical results of the solution collected from monitoring locations identified in I.D.7 and I.D.8;
 - c. A synopsis of spills and releases on NDEP Form 0390;
 - d. A brief summary of site operations, including the number of tons of ore processed or placed on heaps (if applicable) during the year, construction and expansion activities and major problems with the fluid management system;
 - e. A table of average daily precipitation amounts reported monthly for a five-year history previous to the date of submittal;
 - f. An updated version of the facility monitoring and sampling procedures and protocols;
 - g. An updated evaluation of the closure plan using specific characterization data for each process component with respect to achieving stabilization; and
 - h. Graphs of leak detection flow rates, pH, total dissolved solids (TDS), sulfate as SO₄, chloride, nitrate (NO₃ + NO₂ as nitrogen), WAD cyanide, mercury, selenium, and arsenic concentration (as applicable), versus time for all fluid sampling points where these constituents are analyzed. These graphs shall display a five-year history previous to the date of submittal. Additional constituents may be required by the Division if deemed necessary.
- 3. Spill Reporting Requirements: The following applies to facilities with an approved Emergency Response Plan. If a site does not have an approved Emergency Response Plan, then all spills must be reported as per NAC 445A.347.
 - a. A release directly into surface or groundwater of any quantity of pollutant, hazardous waste or contaminant must be reported to the Division as soon as possible, but no later than 5 P.M. of the first working day after knowledge of the release. An oral report shall be made by telephone to 888-331-6337 for in-State callers or (775) 687-9485 for out-of-State callers, and a written report shall be provided within ten (10) days in accordance with Part II.B.4.b.
 - b. A release of a substance in a quantity equal to or greater than that covered by 40 C.F.R. Part 302.4 must be reported as required by NAC 445A.347 and Part II.B.3.a.
 - c. A release of solutions containing a pollutant, hazardous waste or contaminant and the quantity is equal to or exceeds five hundred (500) gallons, report as per Part II.B.3.a. Report smaller spills quarterly on NDEP Form 0390 or equivalent.
 - d. Petroleum Products: If a release enters a surface water or is on or in

- groundwater, or if the quantity is equal to or greater than one-hundred (100) gallons released to soil or a land surface, report in the time frame specified in II.B.3.a. A smaller release, greater than twenty-five (25) gallons but less than 100 gallons, released to soil in at least three (3) cubic yards of effective soil, report quarterly on NDEP Form 0390 or equivalent.
- e. Ethylene Glycol: If the quantity is equal to or greater than 25 gallons, report as per Part II.B.3.a. Smaller spills are reported quarterly on NDEP Form 0390 or equivalent.
- 4. The Permittee shall report to the Administrator any noncompliance with the permit.
 - a. Each such event shall be reported orally by telephone to (775) 687-9400, not later than 5 P.M. of the next regular work day from the time the Permittee has knowledge of the circumstances. This report shall include the following:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident, condition, or circumstance;
 - iv. Name and quantity of materials released; if process solution is released, total gallons and quantity of contaminant;
 - v. Human and animal mortality or injury;
 - vi. An assessment of actual or potential hazard to human health and the environment outside the facility; and
 - vii. The estimated quantity of material that will be disposed and the disposal location.
 - b. A written summary shall be provided within ten (10) days of the time the Permittee makes the oral report. The written summary shall contain:
 - i. A description of the release or discharge and its cause;
 - ii. The periods of the release or discharge (including exact dates and times);
 - iii. Whether the cause and its consequences have been corrected, and if not, the anticipated time each is expected to continue; and
 - iv. The steps taken or planned to reduce, eliminate, and prevent recurrence of the event.
 - c. The Permittee shall take all available and reasonable actions, including more frequent and enhanced monitoring to:
 - i. Determine the effect and extent of each release or discharge;
 - ii. Minimize any adverse impact to the waters of the State arising from each

release or discharge;

- iii. Minimize the effect of each release or discharge upon domestic animals and all wildlife; and
- iv. Minimize the endangerment of the public health and safety, which arises from each release or discharge.

C. Remediation Reporting Requirements

- 1. Cooling Tower #2 Remediation Reporting Requirements: The Permittee shall continue to perform the remediation, pursuant to the approved plan, and shall submit quarterly status reports, which are due to the Division on or before the 28th day of the month following the quarter and must contain the following:
 - a. All monitoring data identified in Parts I.D.12 and I.D.13;
 - b. An evaluation of performance and any proposed changes;
 - c. Graphs covering the period of May 2003 to the present:
 - i. Pumping rates for observation monitoring well OMW-14 and dewatering point DPN-1F;
 - ii. Depth to water for OMW-13, OMW-14, DPN-1F and ground water well GW-47;
 - iii. Arsenic, antimony and mercury concentrations for OMW-13, OMW-14, DPN-1F and GW-47; and

These actions shall continue until the arsenic concentrations in OMW-14 and DPN-1F are consistently below 0.05 mg/l Profile I criteria limit and NDEP-BMRR approves cessation of the required activities. At that time OMW-14 shall be converted back to an observation monitoring well.

- 2. Smith Mine Shop Fuel Farm Remediation Reporting Requirements: The Permittee shall continue to perform delineation and remediation pursuant to the approved plan and shall submit quarterly status reports, which are due to NDEP-BMRR on or before the 28th day of the month following the quarter and must contain the following:
 - a. All monitoring data identified in Parts I.D.14 and I.D.15; and
 - b. An evaluation of performance and any proposed changes.
- 3. Tailings Seepage Remediation Reporting Requirements: The Permittee shall submit quarterly reports, which are due to the Division on or before the 28th day of the month following the quarter and must contain the following:
 - c. All monitoring data identified in Parts I.D.19, I.D.20, I.D.21 and I.D.22; and

d. An evaluation of performance and any proposed changes.

D. Administrative Requirements

- 1. A valid permit must be maintained until permanent closure is complete. Therefore, unless permanent closure has been completed, the Permittee shall apply for permit renewal not later than one hundred twenty (120) days before the permit expires.
- 2. All reports and other information requested by the Administrator shall be signed and certified as required by NAC 445A.231.
- 3. When ordered consistent with Nevada Statutes, the Permittee shall furnish any relevant information in order to determine whether cause exists for modifying, revoking and reissuing, or permanently revoking this permit, or to determine compliance with this permit.
- 4. The Permittee shall maintain a copy of, and all modifications to, the current permit at the permitted facilities at all times.
- 5. The Permittee is required to retain during operation, closure and post-closure monitoring, all records of monitoring activities and analytical results, including all original strip chart recordings for continuous monitoring instrumentation, and all calibration and maintenance records. This period of retention must be extended during the course of any unresolved litigation.
- 6. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not thereby be affected.
- 7. The Permittee is authorized to manage fluids and solid wastes in accordance with the conditions of this permit. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under the Water Pollution Control Statutes for releases or discharges from facilities or units not regulated by this permit. NRS 445A.675 provides that any person who violates a permit condition is subject to administrative or judicial action provided in NRS 445A.690 through 445A.705.

E Division's Authority

The Permittee shall allow authorized representatives of the Division, at reasonable times, and upon the presentation of credentials to:

1. Enter the Permittee's premises where a regulated activity is conducted or where records are kept per the conditions of this permit;

- 2. Have access to and copy any record that must be kept per the conditions of this permit;
- 3. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated by this permit; and
- 4. Sample or monitor for any substance or parameter at any location for the purposes of assuring permit and regulatory compliance.

F. Sampling and Analysis Requirements

- 1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- 2. For each measurement or sample taken pursuant to the conditions of this permit, the Permittee shall record the following information:
 - a. The exact place, date, and time of the inspection, observation, measurement, or sampling; and
 - b. The person(s) who inspected, observed, measured, or sampled.
- 3. Samples must be taken, preserved, and labeled according to Division approved methods.
- 4. Standard environmental monitoring chain of custody procedures must be followed.
- 5. Samples shall be analyzed by a laboratory certified by the State of Nevada. The Permittee must identify the certified laboratory used to perform the analyses, laboratory reference number, sample date and laboratory test date in quarterly reports.
- 6. The accuracy of analytical results, unless otherwise specified, shall be expressed in mg/L and reliable to at least two (2) significant digits. The analytical methods used must have a lower level of detection equal to or less than one-half the MCL for Profile I and Profile III constituents. Profile II constituents that have established standards shall be quantified using an analytical method with a lower level of detection equal to or less than the standard.

G. Permit Modification Requirements

- 1. Any material modification must be reported by submission of a new application, or, if such changes will not violate the limitations specified in the permit, by notice to the permit issuing authority of such changes. Any change, which materially modifies, as defined in NAC 445A.365, the permitted facility must comply with NAC 445A.392, NAC 445A.416, and NAC 445A.417.
- 2. Prior to the commencement of mining activities at any site within the State which is owned or operated by the Permittee but not identified and characterized in the application, the Permittee shall submit to the Division a report which identifies the locations of the proposed mine areas and waste disposal sites, and characterizes the

potential of mined materials to release pollutants. Prior to development of these areas the Division shall determine if any of these new sources will be classified as process components and require engineered containment as well as permit modification.

- 3. The Permittee must notify the Division in writing at least thirty (30) days before the introduction of process solutions into a new process component or into an existing process component, which has been materially modified, or of the intent to commence active operation of that process component.
- 4. The Permittee must obtain a written determination from the Administrator of any planned material modification(s) as to whether it is considered a permit modification.
- 5. The Permittee must give advance notice to the Administrator of any planned changes or activities which are not material modifications in the permitted facility that may result in noncompliance with permit requirements.

Prepared by: Rob Kuczynski, P.E. Date: June 12, 2004

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